

GP-303115

METHOD AND APPARATUS FOR A VARIABLE DISPLACEMENT
INTERNAL COMBUSTION ENGINE

ABSTRACT OF THE DISCLOSURE

An engine control system including a variable displacement internal combustion engine, a plurality of cylinders located in the internal combustion engine, a plurality of fuel injectors for providing fuel to the
5 plurality of cylinders, a plurality of valves coupled to the plurality of cylinders, the plurality of valves controlling the air flow in and out of the cylinders, an actuation apparatus for actuating the plurality of valves, an intake manifold coupled to the internal combustion engine, a throttle coupled to the intake manifold, a controller electronically coupled to the fuel
10 injectors, an accelerator pedal position sensor electronically coupled to the controller, and where the controller determines the number of the cylinders to provide with fuel and air and a desired engine output torque based on the accelerator pedal position sensor and a hysteresis value.